CLAIMS

1. A procedure for the production by blowing and cold box curing of an exothermic sleeve for foundry moulds which comprises:

(A) introducing, by blowing, in the space defined between the mould and two cores, a mixture for the production of an exothermic sleeve, obtaining an uncured sleeve, open at both its ends, the opening of the mouth having an internal double chamfer, whilst the other opening is normally flat, in which said mixture for the production of exothermic sleeves comprises:

a. a fluoride-free composition for the production of sleeves which comprises:

a.1) an insulating/refractory material

a.2) an exothermic mixture based on an oxidizable metal, an oxidizing agent capable of producing an exothermic reaction and magnesium as initiator element of the reaction;

b. a binding agent for cold box curing;

(B) putting the uncured sleeve prepared in (A) with a catalyst for curing said uncured sleeve;

(C) leaving the sleeve resulting from (B) to be cured;

(D) removing the cured sleeve from the mould; and

(E) locating a plug in the orifice of the base opposite the mouth of the sleeve.

2. Procedure according to claim 1, wherein said insulating material with refractory properties (a.1) is aluminium silicate in the form of hollow

microspheres.

3. Procedure according to claim 1, wherein said oxidizable metal is aluminium, preferably a mixture of fine and coarse powder of this metal.

4. Procedure according to claim 1, wherein said oxidizing agent is selected from the group formed by salts of alkaline metals or alkaline earths, metallic oxides, and mixtures thereof.

5. Procedure according to claims 1 and 4, in which said oxidizing agent is selected of the group formed by nitrates, chlorates and permanganates of alkaline metals or alkaline earths, iron oxide, manganese oxide, and mixtures thereof.

6. Procedure according to claim 1, wherein said exothermic material (a.2) is in non-fibrous form, that is, in blowable form.

7. Procedure according to claim 1, wherein said cold box curing binding agent is selected from the group formed by phenol resins, phenol-urethane resins, acrylic resins, alkaline phenol resins and resins of silicates.

8. Procedure according to claim 12, wherein said cold box curing binding agent is selected from the group formed by acrylic resins activated by SO_2 (gas) and phenol-urethane resins activated by amine (gas).

9. Procedure according to claim 1, wherein, in stage (B), the uncured sleeve prepared in stage (A) is put in contact with a catalyst in the gaseous phase suitable for curing said sleeve.

10. Procedure according to claim 1, wherein said catalyst for curing the uncured sleeve is a catalyst in the gaseous phase selected from among a gaseous amine to activate phenol-urethane resins; SO_2 (gas) to activate acrylic resins; CO_2 (gas) or methyl formate (gas) to activate alkaline phenol resins; and CO_2 (gas) to activate sodium silicate resins.

11. Sleeve, according to claim 1, characterised in that when moulded, de-moulded and cured, it has a mouth for the entrance of the melt which has to form the deadhead provided with an internal peripheral chamfer, which will produce in the deadhead a rut or slot of equivalent geometry, whilst the orifice opposite the mouth is closed with a plug of plastic, wood, sawdust, sand or even of the actual material which constitutes the sleeve.